

**Work Order ID 55466**

January 19, 2010 9:50:40 AM

Page 1

Item ID: D3512-1

Accept

Setup Start

Revision ID:

Stop

Item Name: Wearplate

Start Date: 1/19/10 Start Qty: 8.00

Required Date: 1/25/10 Req'd Qty: 8.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: *R/*Date: *10-1-19*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D3512

Rev C

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3512 Dwg Rev: *C* Prog Rev: *C* 112-  
Deburr if necessary*10-1-25**(12)**304.063*

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

*10-1-25*

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

*2) 8/10/125**(12)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 55466**

January 19, 2010 9:50:40 AM

Page 2

Item ID: D3512-1

Accept

Setup Start

Revision ID:

Stop

Item Name: Wearplate

Start Date: 1/19/10 Start Qty: 8.00

Required Date: 1/25/10 Req'd Qty: 8.00

Cust Item ID:

Customer:

Reference:

Run Start

Approvals: Process Plan:

Date: Tooling:

Date:

QC:

Date: SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130



Brake NC

Brake NC

NC BRAKE

Memo

Debur if necessary!! Form as per dwg D3512 using DT8179

0.00

0.00

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

150



Large Fab

Large Fab

Large Fab

Memo

Weld hard surface using DT8874 as per Dwg D3512 & QSI 004 Qty  
Description Batch: A/R 2059b Hardcoat Rod M113521

0.00

0.00

JB 10/01/28

2) 8/10/12/28

EL 10-2-1

(12)

(4/2)

(4/2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 55466**

January 19, 2010 9:50:40 AM

Page 3

Item ID: D3512-1

Accept

Revision ID:

Item Name: Wearplate

Start Date: 1/19/10 Start Qty: 8.00

Required Date: 1/25/10 Req'd Qty: 8.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

QC10- Inspect visual per QSI004- ground welds

0.00

=&gt; 81062101

(X12)

QC

Memo

0.00

Quality Control

170

QC5- Inspect part completeness to step on W/O

0.00

=&gt; 81062101

(X12)

QC

Memo

0.00

Quality Control

180

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

M112580

0.00

=&gt; M 10/02/10

(X12)

Powdercoat

Memo

START TIME: 1:00pm OVEN TEMPERATURE:

1:30pm FINISH TIME:

320°F

Powder Coating

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 55466**

January 19, 2010 9:50:40 AM

Page 4

Item ID: D3512-1

Accept

Setup Start

Revision ID:

Stop

Item Name: Wearplate

Start Date: 1/19/10 Start Qty: 8.00

Required Date: 1/25/10 Req'd Qty: 8.00

Cust Item ID:

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190

QC3- Inspect Part Finish

0.00

QC

Memo

0.00

Quality Control

BK 10-02-11 (12) d

200

Identify as per dwg &amp; Stock Location: 500

0.00

Packaging

Memo

0.00

Packaging

Per 10/2/11 (12)

210

QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

10/02/11 MF  
10-2-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

January 19, 2010 9:50:44 AM

Page 1  
1

Work Order ID: 55466



Parent Item: D3512-1

Parent Item Name: Wearplate

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:A New Issue 06-06-20 JLM  
IPP Rev:B Now SS as per Rev B 06-12-15 JLM  
IPP Rev:C Rev C dwg 07-12-06 DD

Start Qty: 8.00

Required Qty: 8.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
M304S16GA		Purchased	No			100	sf	260.9779	2.1979	4.		
304/316 Sheet .063												

10-1-25

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

MAT

260.9778737

106860

8.0295

111924

25.1689737

112442

29.8899

113295

197.8895

113295

②

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

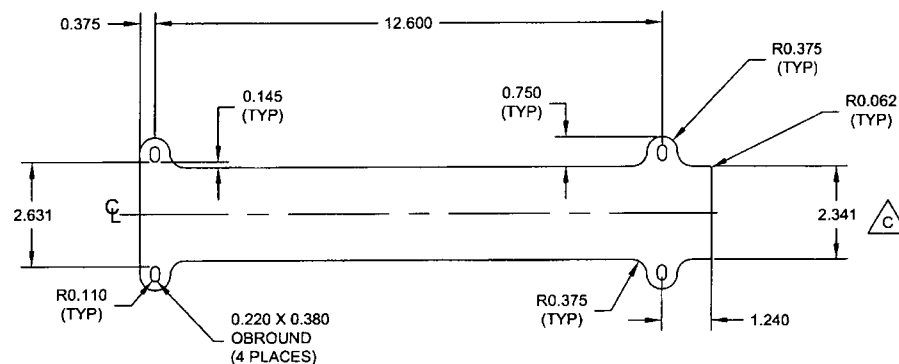
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

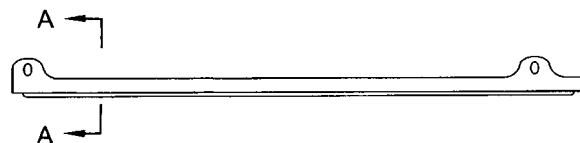
**NOTE:** Date & initial all entries

SHOP COPY 1

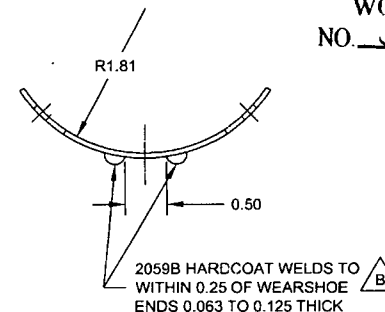
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 554164  
10-1-19



**D3512-1F FLAT PATTERN**



**D3512-1 BENDING DETAIL**



**SECTION A-A**  
SCALE 2:3

RELEASED  
67-11-16 161



**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK)  
(REF. DART MATERIAL SPEC M304S16GA)
- 2) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.31 lbs

C	ENLARGE OBOUND FOR EASIER ASSEMBLY UPDATE DRAWING FORMAT ADD WEIGHT	PH	07.10.05
B	CHANGE MATERIAL TO STAINLESS STEEL	PH	06.10.27
A	NEW ISSUE	PH	06.04.21
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	07.10.05		

**DART AEROSPACE USA, INC**  
PORT HADLOCK, WA

DRAWING NO. REV. C  
D3512 SHEET 1 OF 1

TITLE SCALE  
WEARPLATE 1:3

COPYRIGHT © 2007 BY DART AEROSPACE USA, INC.  
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT  
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries